Page 1 of 1

STIC-EIC1600/2900

From: CRAIG RICCI [craig.ricci@uspto.gov]

Sent: Thursday, July 31, 2008 2:03 PM

To: STIC-EIC1600/2900
Cc: NPL Feedback

Subject: Search Request, Case/Application No.: 10587637

Requester: CRAIG RICCI (P/1614) Art Unit: GROUP ART UNIT 1614 Employee Number:

Office Location: CLC 33003
Phone Number: (571)270-5864

Case/Application number: 10587637

Priority Filing Date: 2003

Format for Search Results: No selection Meaning of unusual acronyms or initialisms:

Identify the novelty:

Additional comments:

Do not limit search to just (S)-configuration of compound.

Attachment: Yes (STIC.doc)

7/31/2008

# Search History

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 14:17:19 ON 01 AUG 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Aug 2008 VOL 149 ISS 5 FILE LAST UPDATED: 30 Jul 2008 (20080730/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D QUE L21

L3 STR

Structure attributes must be viewed using STN Express query preparation.

L4 1920 SEA FILE=REGISTRY SSS FUL L3

L14 STR

G1 Cy,Ak,SO2,[@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.

L16 22 SEA FILE=REGISTRY SUB=L4 SSS FUL L14
L18 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L16
L19 144 SEA FILE=HCAPLUS ABB=ON PLU=ON SCHELLER D?/AU

L20 1242 SEA FILE=HCAPLUS ABB=ON PLU=ON HANSEN K?/AU

L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L19 OR L20) AND L18

#### => D IBIB ED ABS HITSTR 1

L21 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:564577 HCAPLUS Full-text

DOCUMENT NUMBER: 143:71801

TITLE: (S)-2-N-propylamino-5-hydroxytetralin as a D3 agonist,

and therapeutic use thereof

INVENTOR(S): Scheller, Dieter; Hansen, Klaus PATENT ASSIGNEE(S): Schwarz Pharma A.-G., Germany

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	rent	NO.			KIND DATE			APPLICATION NO.						DATE					
WO	2005	0582	96		A1	_	2005	0630		WO 2	004-	EP14	143		2	0041	213		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
	TJ, TM, TI				TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ΖW,	AM,		
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,		
	RO, SE, SI					TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,		
		MR,	NE,	SN,	TD,	ΤG	G.												
DE	1035	9528			A1 2005072		0728	8 DE 2003-10359528					20031218						
ΑU	2004	2983	41		A1 20050630		0 AU 2004-298341						20041213						

CA	2547	820			A1		2005	0630	O CA 2004-2547820						20041213				
EP	1694	318			A1		2006	0830		ΕP	2004-	8037	81		20041213				
EP	1694	318			В1		2007	0314											
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	PL,	SK,		
		BA,	HR,	IS,	ΥU														
CN	1929	829			Α		2007	0314		CN	2004-	8003	7389		20041213				
BR	2004	01773	39		Α		2007	0403		BR	2004-	1773	9		20041213				
AT .	3566	21			T		2007	0415		ΑT	2004-	8037	81		2	0041	213		
JP .	2007	5146	74		T	20070607 JP 20						5442	20041213						
ES.	2282	923			Т3		20071016 ES 2004-8037					81		2	0041	213			
MX .	2006	PA066	596		Α	20060831 MX 2006-F					PA66	96		2	0060	613			
HK	1094	421			A1	2007080			HK 2007-101358						20070205				
US .	2007	01974	480		A1		2007	0823	1	US	2007-	5876	37		2	0070	206		
PRIORITY	.:						DE	2003-	1035	9528	7	A 2	0031	218					
									1	WO	2004 -	EP14	143	1	W 2.	0041	213		

OTHER SOURCE(S): MARPAT 143:71801

ED Entered STN: 30 Jun 2005

AB The invention discloses a medicament containing (S)-2-N-propylamino-5-hydroxytetralin, or a salt or prodrug thereof. As a D3 agonist, (S)-2-N-propylamino-5-hydroxytetralin is suitable particularly for the treatment of DOPA-sensitive movement disorders.

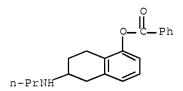
IT 855127-36-5

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

((S)-2-N-propylamino-5-hydroxytetralin as D3 agonist, and therapeutic use)

RN 855127-36-5 HCAPLUS

CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, 1-benzoate (CA INDEX NAME)



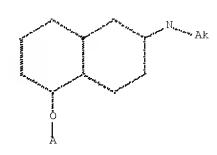
REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

# Structure Search

=> D QUE L18

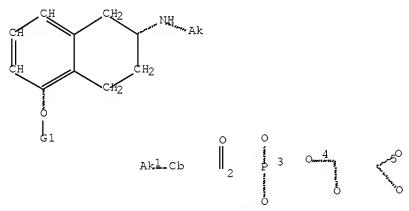
L3 STR



Structure attributes must be viewed using STN Express query preparation.

L4 1920 SEA FILE=REGISTRY SSS FUL L3

L14 STR



G1 Cy, Ak, SO2, [@1], [@2], [@3], [@4], [@5]

Structure attributes must be viewed using STN Express query preparation.

L16 22 SEA FILE=REGISTRY SUB=L4 SSS FUL L14 L18 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L16

=> S L18 NOT L21

L22 39 L18 NOT L21

=> D IBIB ED ABS HITSTR L22 1-39

L22 ANSWER 1 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:361174 HCAPLUS Full-text

DOCUMENT NUMBER: 148:569308

TITLE: Simultaneous enantioseparation of antiparkinsonian

medication rotigotine and related chiral impurities by capillary zone electrophoresis using dual cyclodextrin

system

AUTHOR(S): Chu, Bao-Lin; Guo, Baoyuan; Zuo, Hongjian; Wang,

Zhihua; Lin, Jin-Ming

CORPORATE SOURCE: State Key Laboratory of Chemical Resource Engineering,

College of Science, Beijing University of Chemical

Technology, Beijing, 100029, Peop. Rep. China

Journal of Pharmaceutical and Biomedical Analysis

(2008), 46(5), 854-859

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 25 Mar 2008

SOURCE:

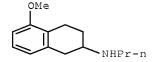
A dual cyclodextrin (CD) system consisting of sulfated  $\beta$ -CD (S- $\beta$ -CD) and AΒ methyl- $\beta$ -CD (M- $\beta$ -CD) modified capillary zone electrophoresis (CZE) method was proposed to sep. the antiparkinsonian drug rotigotine and related chiral impurities (2-(N-propylamino)-5- hydroxytetralin, 2-(N-propylamino)-5methoxytetralin). The method was optimized by varying the CD type, the buffer pH, individual CD concentration of the dual system and the ionic strength of background electrolyte. Under the optimum conditions, i.e. 2% (w/v) S- $\beta$ -CD and 2% (w/v) M- $\beta$ -CD in 100 mM sodium phosphate (pH 2.5) as the running buffer, separation voltage -20 kV, detected at 200 nm and temperature controlled at 20°, a satisfactory separation of the six analytes was accomplished. The optimized method was validated for specificity, precision, linearity, accuracy and stability using sodium benzenesulfonate as the internal standard The relative standard deviation for migration time was less than 0.58%, and 3.78% for peak area ratio. The linearity ranged from 0.005 to 0.25 mM. The recovery ranged from 95.9% to 108.3%. The limits of detection and limits of quantification for each enantiomer were 0.003 and 0.01 mM, resp. This method was used to evaluate the chiral purity of five batches of rotigotine.

IT 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin

RL: ARU (Analytical role, unclassified); ANST (Analytical study) (simultaneous enantiosepn. of antiparkinsonian medication rotigotine and related chiral impurities by capillary zone electrophoresis using dual cyclodextrin system)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1419171 HCAPLUS Full-text

DOCUMENT NUMBER: 148:182426

TITLE: Further Structure-Activity Relationships Study of

Hybrid 7-{[2-(4-Phenylpiperazin-1-

yl)ethyl]propylamino}-5,6,7,8-tetrahydronaphthalen-2ol Analogues: Identification of a High-Affinity D3-Preferring Agonist with Potent in Vivo Activity

with Long Duration of Action

AUTHOR(S): Biswas, Swati; Zhang, Suhong; Fernandez, Fernando;

Ghosh, Balaram; Zhen, Juan; Kuzhikandathil, Eldo;

Reith, Maarten E. A.; Dutta, Aloke K.

CORPORATE SOURCE: Department of Pharmaceutical Sciences, Wayne State

University, Detroit, MI, 48202, USA

SOURCE: Journal of Medicinal Chemistry (2008), 51(1), 101-117

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:182426

ED Entered STN: 13 Dec 2007

GΙ

$$\begin{array}{c|c}
 & C1 & C1 \\
\hline
 & & CH_2-CH_2-N & N
\end{array}$$

Ι

AB This paper describes an extended structure-activity relationships study of aminotetralin-piperazine-based hybrid mols. developed earlier for dopamine D2/D3 receptors. Various analogs as positional isomers have been developed where location of the phenolic hydroxyl group has been varied on the aromatic ring. Between two catechol derivs., compound 6e with a two methylene linker length exhibited higher affinity and selectivity for D3 over D2 receptors over compound 6f with four methylene linkers (D2/D3 = 50.6 vs 7.51 for 6e and 6f, resp.). In general, the (-)-isomer was more potent than the (+)-isomeric counterpart. Binding results indicated highest selectivity for D3 receptors in compound (-)-10 (Ki = 0.35 nM; D2/D3 = 71). In the 5-hydroxy series, highest selectivity for D3 receptors was exhibited by compound (-)-25 (I) (Ki = 0.82 nM; D2/D3 = 31.5). Most potent compds. exhibited binding and functional affinities at the sub-nanomolar level for the D3 receptor. assays were carried out with HEK-293 cells expressing either D2 or D3 receptors by using tritiated spiperone as radioligand for competition studies to evaluate inhibition consts. (Ki). A functional assay of selected compds. for stimulating GTPyS binding was carried out with CHO cells expressing human D2 receptors and AtT-20 cells expressing human D3 receptors. The functional assay results indicated partial to full agonist characteristics of test compds. Compound (-)-25 was selected further for in vivo study to evaluate its potency in producing contralateral rotations in rats with unilateral lesion in the nigrostriatal region induced by neurotoxin 6-OHDA, a Parkinsonian animal model. Compound (-)-25 at 5  $\mu$ mol/kg exhibited rotational activity that lasted beyond 12 h, whereas at a 1 µmol/kg dose the rotations lasted beyond 8 h.

IT 101403-24-1P 101403-25-2P

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(piperazinyl naphthalenol derivs. as dopamine receptor agonists)

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA

INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 3899-07-8P 93601-85-5P 93601-86-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(piperazinyl naphthalenol derivs. as dopamine receptor agonists)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

RN 93601-85-5 HCAPLUS

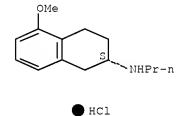
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:873237 HCAPLUS Full-text

DOCUMENT NUMBER: 147:277913

TITLE: Improved method and kit for automated resolving

agents, especially amino acid derivatives, and

solvents selection

INVENTOR(S): Vaidya, Niteen A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 29pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070185346	A1	20070809	US 2006-347532	20060203
WO 2007092264	A2	20070816	WO 2007-US2800	20070131
WO 2007092264	A3	20071129		
W: AE, AG,	AL, AM, AT	, AU, AZ, BA	BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, CO,	CR, CU, CZ	, DE, DK, DM	I, DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, GH,	GM, GT, HN	, HR, HU, ID	, IL, IN, IS, JP,	KE, KG, KM, KN,
KP, KR,	KZ, LA, LC	, LK, LR, LS	, LT, LU, LV, LY,	MA, MD, MG, MK,
MN, MW,	MX, MY, MZ	, NA, NG, NI	, NO, NZ, OM, PG,	PH, PL, PT, RO,
RS, RU,	SC, SD, SE	, SG, SK, SL	, SM, SV, SY, TJ,	TM, TN, TR, TT,

TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2006-347532 A2 20060203

ED Entered STN: 10 Aug 2007

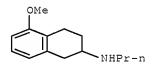
AΒ The invention is related to a kit for improved identification of the optimal conditions for diastereomeric salt crystallization and the selection of the optimal resolving agents, especially amino acid derivs., and solvents, which include A. an array of containers wherein the array is a standard high throughput tray and the containers are a multiplicity of substantially identical containers or well plates each optionally sealed with a sealant or stoppers to avoid loss of chemical solvent; B. wherein each substantially identical container has a unique combination of resolving agent in each column and at least one suitable solvent in each row; and C. an instructional text to use said kit. The tray of 24, 48, 96 or more samples is examined simultaneously visually or by standard anal. techniques. Resolution of  $(\pm)$ -2phenylpropionic acid was studied with both amines and acids as resolving agents. Strychnine in 96% ethanol was ideal system for (+)-isomer, while quinidine in 96% ethanol was the system of choice for (-)-isomer. Pyroglutamic acid in 70% isopropanol was ideal system for (+)-isomer, while malic acid in in 1-butanol was the system of choice for (-)-isomer. 3899-07-8 ΙT

RL: RCT (Reactant); RACT (Reactant or reagent)

(resolving agent; method and kit for automated resolving agents, especially from amino acid derivs., and solvents selection)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 4 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:767212 HCAPLUS Full-text

DOCUMENT NUMBER: 132:233690

TITLE: Radiosynthesis and in vitro evaluation of

2-(N-alkyl-N-1'-11C-propyl)amino-5-hydroxytetralin analogs as high affinity agonists for dopamine D2

receptors

AUTHOR(S): Shi, Bingzhi; Narayanan, Tanjore K.; Yang, Zhi-Ying;

Christian, Bradley T.; Mukherjee, Jogeshwar

CORPORATE SOURCE: Department of Internal Medicine/Nuclear Medicine, Kettering Medical Center, Wright State University,

Dayton, OH, USA

SOURCE: Nuclear Medicine and Biology (1999), 26(7), 725-735

CODEN: NMBIEO; ISSN: 0969-8051

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 06 Dec 1999

AΒ We have developed radiotracers based on agonists that may potentially allow the in vivo assessment of the high affinity (HA) state of the dopamine D-2 receptors. The population of HA state, which is likely the functional state of the receptor, may be altered in certain diseases. We carried out radiosyntheses and evaluated the binding affinities, lipophilicity, and in vitro autoradiog. binding characteristics of three dopamine D-2 receptor agonists:  $(\pm)-2-(N,N-dipropyl)$ amino-5- hydroxytetralin (5-OH-DPAT),  $(\pm)-2-(N-dipropyl)$ phenethyl-N-propyl) amino-5- hydroxytetralin (PPHT), and  $(\pm)$ -2-(Ncyclohexylethyl-N-propyl)amino-5- hydroxytetralin (ZYY-339). In 3H-spiperone assays using rat striata, ZYY-339 exhibited subnanomolar affinity for D-2 receptor sites (IC50 = 0.010 nM), PPHT was somewhat weaker (IC50 = 0.65 nM), and 5-OH-DPAT exhibited the weakest affinity (IC50 = 2.5 nM) of the three compds. Radiosynthesis of these derivs., 2-(N-propyl-N-1'-11C-propyl)amino-5hydroxytetralin (11C-5-OH-DPAT), 2-(N-phenethyl-N-1'-11C-propy1)amino-5hydroxytetralin (11C-PPHT), and 2-(N-cyclohexylethyl-N-1'-11C-propyl)amino- 5hydroxytetralin (11C-ZYY-339) was achieved by first synthesizing 11C-1propionyl chloride and subsequent coupling with the appropriate secondary amine precursor to form the resp. amide, which was then reduced to provide the desired tertiary amine products. The final products were obtained by reversephase high performance liquid chromatog. (HPLC) purification in radiochem. yields of 5-10% after 60-75 min from the end of 11C02 trapping and with specific activities in the range of 250-1,000 Ci/mmol. In vitro autoradiographs in rat brain slices with 11C-5-OH-DPAT, 11C-PPHT, and 11C-ZYY-339 revealed selective binding of the three radiotracers to the dopamine D-2 receptors in the striata.

IT 3899-07-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(radiosynthesis and in vitro evaluation of 2-(N-alkyl-N-1'-11C-propyl) amino-5-hydroxytetralin analogs as high affinity agonists for dopamine D2 receptors)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:536677 HCAPLUS Full-text

DOCUMENT NUMBER: 131:299273

TITLE: Derivatives of (R)-2-amino-5-methoxytetralin:

antagonists and inverse agonists at the dopamine  ${\tt D2A}$ 

receptor

AUTHOR(S): Hook, Berit Backlund; Brege, Cecilia; Linnanen, Tero;

Mikaels, Asa; Malmberg, Asa; Johansson, Anette M.

CORPORATE SOURCE: Organic Pharmaceutical Chemistry, Uppsala Biomedical

Centre, Uppsala University, Uppsala, SE-751 23, Swed.

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999),

9(15), 2167-2172

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 27 Aug 1999

As series of N-(arylmethyl)-substituted (R)-5-methoxy-2- (propylamino)tetralins has been prepared and evaluated for affinity and efficacy at dopamine D2A receptors. The novel compds. appeared to be antagonists or inverse agonists. (R)-2-(Benzylpropylamino)-5- methoxytetralin was characterized as a potent inverse agonist at D2A receptors in a [35S]GTPyS binding assay.

IT 101403-25-2P

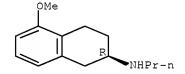
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

((R)-2-amino-5-methoxytetralin derivative antagonists and inverse agonists at dopamine D2A receptor)

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:485957 HCAPLUS Full-text

DOCUMENT NUMBER: 131:243049

TITLE: Synthesis and pharmacology of the enantiomers of the potential atypical antipsychotic agents 5-OMe-BPAT and

5-OMe-(2,6-di-OMe)-BPAT

AUTHOR(S): Homan, Evert J.; Copinga, Swier; Unelius, Lena;

Jackson, David M.; Wikstrom, Hakan V.; Grol, Cor J. Department of Medicinal Chemistry, University Centre

CORPORATE SOURCE: Department of Medicinal Chemistry, University Centr

for Pharmacy, University of Groningen, Groningen,

NL-9713 AV, Neth.

SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(7),

1263-1271

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 06 Aug 1999

GΙ

The optically pure enantiomers of the potential atypical antipsychotic agents AΒ methoxybenzamidoethyl-N-propylaminotetralin I (R = H) (5-MeO-BPAT) and methoxy-N-dimethoxybenzamidoethyl-N-n-propylaminotetralin I (R = MeO) weresynthesized and evaluated for their in vitro binding affinities at  $\alpha 1$ -,  $\alpha 2$ -, and  $\beta$ -adrenergic, muscarinic, dopamine D1, D2A, and D3, and serotonin 5-HT1A and 5-HT2 receptors. In addition, their intrinsic efficacies at serotonin 5-HT1A receptors were established in vitro. Both enantiomers of I (R = H) had high affinities for dopamine D2A, D3, and serotonin 5-HT1A receptors, moderate affinities for  $\alpha 1$ -adrenergic and serotonin 5-HT2 receptors, and no affinity (Ki > 1000 nM) for the other receptor subtypes. Both enantiomers of I (R = MeO) had lower affinities for the dopamine D2A and the serotonin 5-HT1A receptor, compared to the enantiomers of I (R = H), and hence showed some selectivity for the dopamine D3 receptor. The interactions with the receptors were stereospecific, since the serotonin 5-HT1A receptor preferred the (S)enantiomers of I while the dopamine D2A and D3 receptors preferred the (R)enantiomers of I. The intrinsic efficacies at the serotonin 5-HT1A receptor were established by measuring their ability to inhibit VIP-induced cAMP production in GH4ZD10 cells expressing serotonin 5-HT1A receptors. Both enantiomers of I (R = H) behaved as full serotonin 5-HT1A receptor agonists in this assay, while both enantiomers of I (R = MeO) behaved as weak partial agonists. The potential antipsychotic properties of (S) - and (R) -I (R = H)were evaluated by establishing their ability to inhibit d-amphetamine-induced locomotor activity in rats, while their propensity to induce extrapyramidal side-effects (EPS) in man was evaluated by determining their ability to induce catalepsy in rats. Whereas (R)-I (R=H) was capable of blocking damphetamine-induced locomotor activity, indicative of dopamine D2 receptor antagonism, (S)-I (R = H) even enhanced the effect of d-amphetamine, suggesting that this compound has dopamine D2 receptor-stimulating properties. Since both enantiomers of I (R = H) also were devoid of cataleptogenic activity, they are interesting candidates for further exploring the dopamine D2/serotonin 5-HT1A hypothesis of atypical antipsychotic drug action.

IT 93601-85-5P 93601-86-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of propylbenzoylaminotetralins and their enantiomers as potential antipsychotic agents and their binding to adrenergic, dopamine, and serotonin receptors)

RN 93601-85-5 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

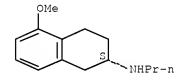
Absolute stereochemistry. Rotation (+).

● HCl

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



● HCl

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 7 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:414226 HCAPLUS Full-text

DOCUMENT NUMBER: 131:170152

TITLE: Structural analogs of 5-OMe-BPAT: synthesis and

interactions with dopamine D2, D3, and serotonin

5-HT1A receptors

AUTHOR(S): Homan, Evert J.; Kroodsma, Esther; Copinga, Swier;

Unelius, Lena; Mohell, Nina; Wikstrom, Hakan V.; Grol,

Cor J.

CORPORATE SOURCE: Department of Medicinal Chemistry, University Centre

for Pharmacy, University of Groningen, Groningen,

NL-9713, Neth.

SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(6),

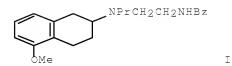
1111-1121

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 07 Jul 1999

GI



AΒ Several structural analogs of 5-OMe-BPAT (I), a representative of a series of 2-aminotetralin-derived benzamides with potential atypical antipsychotic properties, were synthesized and evaluated for their ability to bind to dopamine D2A, D3, and serotonin 5-HT1A receptors in vitro. The structureaffinity relationships revealed that the aromatic ring of the benzamide moiety of I contributes to the high affinities for all three receptor subtypes. Furthermore, I may interact with the dopamine D2 and D3 receptors through hydrogen bond formation with its carbonyl group. Investigation of the role of the amide hydrogen atom by amide N-alkylation was not conclusive, since conformational aspects may be responsible for the decreased dopaminergic affinities of the N'-alkylated analogs of I. The effects of amide modifications on serotonin 5-HT1A receptor affinity were less pronounced, suggesting that the benzamidoethyl side-chain of I as a whole enhances the affinity for this receptor subtype, probably through hydrophobic interactions with an accessory binding site. The structural requirements for the substituents at the basic nitrogen atom supported the hypothesis that the 2aminotetralin moieties of the 2-aminotetralin-derived substituted benzamides may share the same binding sites as the 2-(di-n-propylamino)tetralins.

IT 3904-24-3

RL: RCT (Reactant); RACT (Reactant or reagent)
 ([(benzamidoethyl)amino]tetralins and their affinity for dopamine D2,
 D3, and serotonin 5-HT1A receptors)

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

HC1

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:1963 HCAPLUS Full-text DOCUMENT NUMBER: 130:191424

TITLE: 2-Aminotetralin-derived substituted benzamides with

mixed dopamine D2, D3, and serotonin 5-HT1A receptor

binding properties: a novel class of potential

atypical antipsychotic agents

AUTHOR(S): Homan, Evert J.; Copinga, Swier; Elfstrom, Lotta; Van Der Veen, Trees; Hallema, Jan-Pieter; Mohell, Nina;

Unelius, Lena; Johansson, Rolf; Wikstrom, Hakan V.;

Grol, Cor J.

CORPORATE SOURCE: Department of Medicinal Chemistry, University Centre

for Pharmacy, University of Groningen, Groningen,

NL-9713 AV, Neth.

SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(11),

2111-2126

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 04 Jan 1999

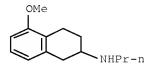
A new chemical class of potential atypical antipsychotic agents, based on the pharmacol. concept of mixed dopamine D2 receptor antagonism and serotonin 5-HT1A receptor agonism, was designed by combining the structural features of the 2-(N, N-di-n-propylamino) tetralins (DPATs) and the 2-pyrrolidinylmethylderived substituted benzamides in a structural hybrid. Thus, a series of 35 differently substituted 2-aminotetralin- derived substituted benzamides was synthesized and the compds. were evaluated for their ability to compete for [3H]-raclopride binding to cloned human dopamine D2A and D3 receptors, and for [3H]-8-OH-DPAT binding to rat serotonin 5-HT1A receptors in vitro. The lead compound of the series, 5-methoxy-2-[N-(2-benzamidoethyl)-N-npropylamino]tetralin, displayed high affinities for the dopamine D2A receptor (Ki = 3.2 nM), the dopamine D3 receptor (Ki = 0.58 nM) as well as the serotonin 5-HT1A receptor (Ki = 0.82 nM). The structure-affinity relationships of the series suggest that the 2-aminotetralin moieties of the compds. occupy the same binding sites as the DPATs in all three receptor subtypes. The benzamidoethyl side chain enhances the affinities of the compds. for all three receptor subtypes, presumably by occupying an accessory binding site. For the dopamine D2 and D3 receptors, this accessory binding site may be identical to the binding site of the 2-pyrrolidinylmethyl-derived substituted benzamides.

IT 3904-24-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of 2-aminotetralin-derived substituted benzamides
with mixed dopamine D2 and D3 and serotonin 5-HT1A receptor binding
properties as novel atypical antipsychotic agents)

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:582958 HCAPLUS Full-text DOCUMENT NUMBER: 127:242822

ORIGINAL REFERENCE NO.: 127:47219a,47222a

TITLE: A novel series of 2-aminotetralins with high affinity

and selectivity for the dopamine D3 receptor

AUTHOR(S): Boyfield, Izzy; Coldwell, Martyn C.; Hadley, Michael

S.; Johnson, Christopher N.; Riley, Graham J.; Scott, Emma E.; Stacey, Rachel; Stemp, Geoffrey; Thewlis,

Kevin M.

CORPORATE SOURCE: SmithKline Beecham Pharmaceuticals, New Frontiers

Science Park, Essex, CM19 5AW, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (1997),

7(15), 1995-1998

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 Sep 1997

AB A novel series of N-[4-(4-Phenylbenzoylamino)butyl]-1,2,3,4-tetrahydro-2-naphthylamines with high affinity and selectivity for the dopamine D3 receptor has been prepared. The 5-cyclopropylmethyloxy, methanesulfonyloxy and trifluoromethanesulfonyloxy derivs. represent some of the highest affinity (pKi's 8.6-8.9) and most selective (200-320-fold) dopamine D3 receptor antagonists reported to date.

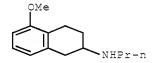
IT 3899-07-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-aminotetralins with high affinity and selectivity for dopamine D3 receptor)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 10 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:708182 HCAPLUS Full-text

DOCUMENT NUMBER: 125:328313

ORIGINAL REFERENCE NO.: 125:61495a,61498a

TITLE: Preparation of bicyclic amine derivatives and their

use as dopamine D3-receptor (ant)agonist antipsychotic

agents

INVENTOR(S): Stemp, Geoffrey; Johnson, Christopher Norbert

PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO	9630	333		A1 19961003 AT, AU, AZ, BB, BG, 1					3 WO 1996-EP1238						19960321			
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FΙ,	GB,	GE,	HU,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LK,	LR,	LS,	LT,	
		LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	
		SG,	SI															
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	, DE,	DK,	ES,	FI,	FR,	GB,	GR,	
		ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN		
AU	9651	471			A		1996	1016		AU 1	1996-	5147	1		1	9960	321	
EP	EP 817767 A1 199801									EP 1	1996-	9081	03		1	9960	321	
EP	8177	67			В1		2000	0524										
	R:	BE,	CH,	DE,	DK,	FR,	GB,	IT,	LI,	NL								
JP	1150	3116			T		1999	0323		JP 1	1996-	5288	99		1	9960	321	
ZA	9602	362			Α		1996	1118		ZA 1	1996-	2362			1	9960	325	
US	6008	219			Α		1999	1228	1	US 1	1997-	9139	19		1	9971	029	
PRIORIT	Y APP	LN.	INFO	.:						GB 1	1995-	6169		3	A 1	9950	327	
										GB 1	1995-	1857	3	1	A 1	9950	912	
										GB 1	1995-	2548	0	1	A 1	9951	213	
									1	WO 1	1996-	EP12	38	1	W 1	9960	321	

OTHER SOURCE(S): MARPAT 125:328313

ED Entered STN: 29 Nov 1996

GΙ

The title compds [I; X= direct bond, O, S, (un)substituted CH2; R1a-R1c = H, halogen, OH, CN, CF3, CF3O, trifluoromethanesulfonyloxy, alkyl, alkoxy, alkylthio, etc.; R2-R5, R7 = H, alkyl; R6 = H, alkyl, alkenyl, arylalkyl; R8 = (un)substituted Ph, (un)substituted naphthyl, (un)substituted 4- (heterocyclyl)phenyl, etc.], useful in therapy as agonists and antagonists of dopamine D3 receptors, particularly as antipsychotic agents (no data), are prepared and I-containing formulations presented. Thus, D3 antagonist 5- chloro-N-[4-(4-phenylbenzoylamino)butyl]-2-(R,S)-propylamino- 1,2,3,4- tetrahydronaphthalene hydrochloride was prepared and demonstrated a D3 receptor pKb in the range of 8.0-10.5.

IT 3899-07-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of bicyclic amine derivs. and their use as dopamine  ${\tt D3-}$  receptor

(ant)agonist antipsychotic agents)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

L22 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:572080 HCAPLUS Full-text

DOCUMENT NUMBER: 125:264979

ORIGINAL REFERENCE NO.: 125:49144h, 49145a

TITLE: Affinity for Dopamine D2, D3, and D4 Receptors of 2-Aminotetralins. Relevance of D2 Agonist Binding for

Determination of Receptor Subtype Selectivity

AUTHOR(S): van Vliet, L. Alexander; Tepper, Pieter G.; Dijkstra,

Durk; Damsma, Geert; Wikstroem, Hkan; Pugsley, Thomas A.; Akunne, Hyacinth C.; Heffner, Thomas G.; Glase,

Shelly A.; Wise, Lawrence D.

CORPORATE SOURCE: Department of Medicinal Chemistry and Molecular

Pharmacology, University of Groningen, Groningen,

NL-9713 AV, Neth.

SOURCE: Journal of Medicinal Chemistry (1996), 39(21),

4233-4237

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 26 Sep 1996

AB A series of 2-aminotetralins, substituted with a methoxy or a hydroxy group on the 5- or 7-position, and with varying N-alkyl or N-arylalkyl substituents, were prepared and evaluated in binding assays for human dopamine (DA) D2, D3, and D4 receptors. Some members of this series were prepared in former studies, but were never tested in vitro with single receptor subtypes, and these were examined again. None of the tested 2-aminotetralins showed high affinity for the dopamine D4 receptor. However, a number of the 2-aminotetralins showed high affinity for both the D2 and the D3 DA receptors, while some had a reasonable selectivity for the DA D3 receptors. The affinities of the 2-aminotetralins for the D2L receptor depended on the type of radioligand (agonist or antagonist) used. The agonist affinity data, obtained by using the agonist ligand [3H]N-0437, are thought to be more relevant for calculating DA receptor subtype selectivity.

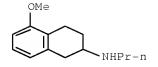
IT 3904-24-3P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(preparation and structure activity relations of aminotetralins as ligands for dopaminergic D2, D3, and D4 receptors)

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L22 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:422384 HCAPLUS Full-text

DOCUMENT NUMBER: 125:86653

ORIGINAL REFERENCE NO.: 125:16345a,16348a

TITLE: Preparation of 2-(N-propylamino)-1,2,3,4-

tetrahydronaphthalene dopaminergic D1 and D2 receptor

agonist cardiovascular agents

INVENTOR(S): Montanari, Stefania; Cavalleri, Paolo; Fraire,

Cristina; Grancini, Gian Carlo; Napoletano, Mauro;

Santangelo, Francesco

PATENT ASSIGNEE(S): Zambon Group S.P.A., Italy SOURCE: PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT :	NO.			KIND DATE			APPLICATION NO.							DATE				
	9608 9608				A2 A3		1996 1996	0321 0725		WO	199	 ∂5-E	EP356	62		1	9950	911	
								JP,											
	RW:							FR,									PT,	SE,	
		BF,	ВJ,	CF,	CG,	CI,		GΑ,			•	•							
US	5674	909			A		1997	1007		US	199	95-4	16563	36		1	9950	606	
CA	2199	484			A1		1996	0321		CA	199	95-2	21994	484	19950911				
AU	AU 9535653						1996	0329		AU	199	95-3	35653	3		1	9950	911	
AU	AU 694563						1998	0723											
EP					A2			0702		EP	199	95-9	3270	3.6		1	9950	911	
	EP 781126 EP 781126				B1		2001									_			
									GB.	GR	. т	E.	TT.	T.T.	LII.	NI	PT.	SE	
нп	7683				A2				GB, GR, IE, IT, LI, I HU 1997-1331								9950		
	1150				T			0126							19950911				
	2149				C1			0520									9950	-	
	2149				T											_	9950 9950		
							2001												
_	2168				T3 20020616												9950	-	
	PT 781126				T 20020628												9950	-	
	FI 9701039					A 19970312			2 FI 1997-1039							19970312			
ИО	NO 9701134						A 19970512			.2 NO 1997-1134						19970312			
PRIORIT	IORITY APPLN. INFO.:									ΙT	199	94 <b>-</b> №	4I186	68		A 1	9940	913	
								WO 1995-EP3562						1	W 19950911				

MARPAT 125:86653 OTHER SOURCE(S):

Entered STN: 18 Jul 1996 ED

GΙ

Ι

The title compds. (I; Markush definitions are provided within the document), useful for the treatment of arterial hypertension, congestive heart failure, renal failure, hypertension, and cerebrovascular insufficiencies, are prepared Thus, (S)-N-propyl-N-[6-[(1,4-benzodioxan-2- yl)methylamino]hexyl]-5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthylamine dihydrochloride was prepared and demonstrated a Ki of 0.66 nM against [3H]-domperidone on rat striated membrane-derived D2 receptors.

IT 101403-24-1

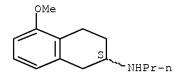
RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 2-(N-propylamino)-1,2,3,4-tetrahydronaphthalene dopaminergic

D1 and D2 receptor agonist cardiovascular agents)

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:915919 HCAPLUS Full-text

DOCUMENT NUMBER: 124:145572 ORIGINAL REFERENCE NO.: 124:27069a

TITLE: Synthesis, resolution and radioiodination of

S(-)trans-5-hydroxy-2-[N-n-propyl-N-(3'-iodo-2'-propenyl)amino]tetralin-S(-)trans-5-OH-PIPAT: a new

dopamine D2-like receptor ligand

AUTHOR(S): Chumpradit, Sumalee; Kung, Mei-Ping; Vessotskie,

Janet; Kung, Hank F.

CORPORATE SOURCE: Deps. Radiology Pharmacology, University Pennsylvania,

Philadelphia, PA, 19104, USA

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals

(1995), 36(11), 1051-62

CODEN: JLCRD4; ISSN: 0362-4803

PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:145572

ED Entered STN: 14 Nov 1995

An ew dopamine D2-like receptor ligand, (R,S)-trans-5-hydroxy-2-[N-n- propyl-N-(3'-iodo-2'-propenyl)amino]tetralin [(R,S)trans-5-OH-PIPAT] (I), based on high affinity dopamine receptor agonist 5-hydroxy-2-[N,N-(di-n- propyl)-2-amino]tetralin (5-OH-DPAT), was prepared The synthesis was achieved by a reductive amination of 5-methoxy-2-tetralone with n-propylamine, followed by N-alkylation, to afford 5-methoxy-N-propyl-N-2'- propynyl-2-aminotetralin (II). Reduction of II with tributyltin hydride gave the tri-Bu tin derivative, which was converted to (R,S)-trans-5-methoxy-2-[N- propyl-N-(3'-iodo-2'-propenyl)amino]tetralin (III) by an iododemetalation reaction. Demethylation of III gave I. The resolved (R)- and (S)-I were also quant.

prepared In vitro binding studies showed the stereoselectivity of this new compound for binding to dopamine D2-like receptors. (S)-(-)-I displayed high binding affinity, with inhibition consts. (Ki) of 0.38, 0.09 and 0.67 nM for dopamine D2H (expressed in HEK293 cells), d3 (expressed in Sf9 cells) and D4H receptors (expressed in CHO cells), resp. Using the same binding assays, the less active R(+) isomer displayed Ki values of 7.29, 4.87 and 16.44 nM for D2H, D3 and D4H receptors, resp. In addition, radiolabeling was successfully performed to give the final radiolabeled product, [125I](R)-(+)- or (S)-(-)-I. 3899-07-8 101403-24-1

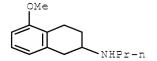
RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis, resolution and radioiodination of dopamine D2-like receptor ligand hydroxy[N-propyl-N-iodopropenyl)amino]tetralin)

RN 3899-07-8 HCAPLUS

TΤ

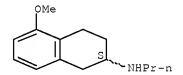
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 14 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:761499 HCAPLUS Full-text

DOCUMENT NUMBER: 123:169373

ORIGINAL REFERENCE NO.: 123:30227a,30230a

TITLE: Preparation of centrally acting 5-8-substituted

sulfone esters of N-monosubstituted 2-aminotetralins

and related structures

INVENTOR(S): Wikstroem, Haakan Vilhelm; Barf, Tjeerd Andries;

Dijkstra, Durk; Damsma, Geert

PATENT ASSIGNEE(S): Damsma-Bloem, Anette J., Neth.; Damsma, Anna; Damsma,

Thijs; Damsma, Miriam

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9426703 A1 19941124 WO 1994-SE465 19940518 W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, TJ, TT, UA, US, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG Α 19941212 AU 1994-68110 AU 9468110 19940518 PRIORITY APPLN. INFO.: SE 1993-1732 A 19930518 WO 1994-SE465 W 19940518

OTHER SOURCE(S): MARPAT 123:169373

ED Entered STN: 29 Aug 1995

GΙ

Title compds. I (R1 = G, C1-8 alkyl, alkenyl, alkynyl, cyclopropylalkyl, halo-C1-8 alkyl; X = H2C, O, S; R2 = F3C, CF3CF2, C1-C8 alkyl, substituted aryl; R3 = H, Me, Et, when R3 is Me or Et, it is always in a cis-relationship to the 2-amine substituent) or a salt thereof, are prepared R-(+)-8-methoxy-2-(n-propylamino)teralin XHCl preparation given was refluxed in HBr to give R-(+)-8-hydroxy-2-(n-propylamino)tetralin XHBr which with N=phenyltrifluoromethanesulfonimide, tetrabutylammonium hydrogensulfonate in CH2Cl2 were stirred at room temperature to give R-(+)-I (R1 = Pr, R2 = F3C which with SO2O is in the 8-position, R3 = H) as XCl salt. The utility of I to treat CNS disorders was demonstrated.

IT 161873-82-1P 167017-01-8P 167017-02-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of centrally acting aminotetralin alkylsufone esters)

RN 161873-82-1 HCAPLUS

CN Methanesulfonic acid, trifluoro-, 5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 167017-01-8 HCAPLUS

CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, 1-benzenesulfonate

(CA INDEX NAME)

RN 167017-02-9 HCAPLUS

CN 2-Thiophenesulfonic acid, 5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester (CA INDEX NAME)

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of centrally acting aminotetralin alkylsufone esters)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

IT 3904-24-3P 101403-25-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of centrally acting aminotetralin alkylsufone esters)

RN 3904-24-3 HCAPLUS

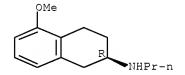
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

HC1

101403-25-2 HCAPLUS RN

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L22 ANSWER 15 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:481878 HCAPLUS Full-text

DOCUMENT NUMBER: 123:217738

ORIGINAL REFERENCE NO.: 123:38431a,38434a

Synthesis and Evaluation of Pharmacological and TITLE:

> Pharmacokinetic Properties of Monopropyl Analogs of 5-, 7-, and 8-[[(Trifluoromethyl)sulfonyl]oxy]-2aminotetralins: Central Dopamine and Serotonin

Receptor Activity

AUTHOR(S): Sonesson, Clas; Barf, Tjeerd; Nilsson, Jonas;

> Dijkstra, Durk; Carlsson, Arvid; Svensson, Kjell; Smith, Martin W.; Martin, Iain J.; Duncan, J. Neil; et

al.

Department of Pharmacology, University of Goeteborg, CORPORATE SOURCE:

Goeteborg, S-413 90, Swed.

SOURCE: Journal of Medicinal Chemistry (1995), 38(8), 1319-29

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:217738

Entered STN: 12 Apr 1995

GΙ

To explore further the structure-activity relationships of serotonergic and AΒ dopaminergic ligands, a series of enantiopure 5-, 7-, or 8-triflate (-OTf)substituted 2-(monopropylamino)tetralins have been synthesized and evaluated in in vitro binding and in vivo biochem. and behavioral assays in rats. Consequently, the 8-OTf-substituted compound R-(+)-I was a potent and selective 5-HT1A (5-hydroxytryptamine) receptor agonist inducing a full-blown 5-HT syndrome in normal rats, while the corresponding 5-OTf-substituted compound S-(-)-II was a preferential dopamine (DA) autoreceptor agonist. A partial 5-HT syndrome was also observed for S-(-)-II, while the corresponding R-(+)-II was inactive at the DA and 5-HT receptors both in vitro and in vivo. Compds. I and II were major urinary metabolites following oral administration of their di-Pr analogs (III and IV, resp.). Thus I was proposed to be the metabolite responsible for the full-blown 5-HT syndrome seen after oral (but not s.c.) administration of III. Similarly, II was proposed to be the metabolite responsible for the partial 5-HT syndrome seen after oral (but not s.c.) administration of IV. The bioavailability of R-(+)-I (7.6%) appeared to be slightly lower than that of III (11.2%), although the in vitro metabolism of R-(+)-I appeared to be slower than that of III. Therefore first-pass metabolism was not thought to be the reason for the lower bioavailability of R-(+)-I as compared to III.

IT 93601-86-6P 101403-25-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis, receptor binding, and pharmacokinetics of monopropyl analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2-aminotetralins)

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

HCl

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 866262-72-8P 866262-74-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis, receptor binding, and pharmacokinetics of monopropyl analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2-aminotetralins)

RN 866262-72-8 HCAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-, (6S)-5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

RN 866262-74-0 HCAPLUS

CN Methanesulfonic acid, 1,1,1-trifluoro-, (6R)-5,6,7,8-tetrahydro-6-(propylamino)-1-naphthalenyl ester, hydrochloride (1:1) (CA INDEX NAME)

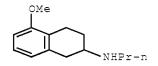
Absolute stereochemistry.

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis, receptor binding, and pharmacokinetics of monopropyl
analogs of 5-, 7-, and 8-[[(trifluoromethyl)sulfonyl]oxy]-2aminotetralins)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 16 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:362675 HCAPLUS Full-text

DOCUMENT NUMBER: 123:143456

ORIGINAL REFERENCE NO.: 123:25541a,25544a

TITLE: Substituted 2-aminotetralins as dopamine receptor

agonists

INVENTOR(S): Sleevi, Mark C.; Minaskanian, Gevork; Moses, L.

Meredith

PATENT ASSIGNEE(S): Whitby Research, Inc., USA

SOURCE: U.S., 18 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT I	NO.			KINI	D	DATE		AP	PLICAT		DATE			
						_									
US	5382	596			A		1995	0117	US	1993-	102436		19	9930	805
CA	2168	097			С		1995	0216	CA	1994-	2168097		19	9940	805
CA	2168	097			A1		1995	0216							
WO	9504	532			A1		1995	0216	WO	1994-	US8845		19	9940	805
	W:	AU,	CA,	JP											
	RW:	AT,	BE,	CH,	DE,	DK	, ES,	FR,	GB, G	R, IE,	IT, LU,	MC,	NL,	PT,	SE
AU	9475	207			Α		1995	0228	AU	1994-	75207		19	9940	805
AU	6823	88			В2		1997	1002							
ΕP	7176	20			A1		1996	0626	EP	1994-	925190		19	9940	805

EP	717620			31	20011031								
	R: AT,	BE,	CH, D	Ξ, Ι	DK, ES, FR,	GB, G	R, IE,	IT, LI,	LU,	MC,	NL, E	PΤ,	SE
JP	09501434	Ŀ		Γ	19970210	JP	1995-	506531		1	994080	)5	
JP	3839043			32	20061101								
AT	207745			Γ	20011115	AT	1994-	925190		1	994080	)5	
ES	2166379			Г3	20020416	ES	1994-	925190		1	994080	)5	
PT	717620			Γ	20020429	PT	1994-	925190		1	994080	)5	
PRIORITY	APPLN.	INFO.	. :			US	1993-	102436	Ž	A 1	993080	)5	
						WO	1994-	US8845	I	v 1	994080	) 5	

OTHER SOURCE(S): MARPAT 123:143456

ED Entered STN: 21 Feb 1995

GI For diagram(s), see printed CA Issue.

AB Optically active or racemic compds. represented by the formula I where R2 is OA and R3 is selected from the group consisting of H and OA; where A is H or is selected from the group consisting of hydrocarbyl radicals comprising between 1 and 3 carbon atoms, as well as COR4, CONHR4, CONR42, and CO2R4, with the proviso that when R3 is OA, then R2 and R3 may be bonded together to form the group OCH2O or OCO2. R4 is selected from the group consisting of alkyl and aromatic residues having from 1 to 20, preferably from 1 to 12, carbon atoms, for example, alkyl, optionally substituted with aromatic residues, and aromatic residues optionally substituted with alkyl radicals; n is an integer from 1 to 4; R5 is an unbranched alkyl chain comprising from 1 and 3 carbon atoms or a cyclopropylmethyl radical; R1 is alkoxy, cycloalkoxy and a cyclic ether of the formula II where m is an integer from 3 to 5; with the proviso that when R1 is alkoxy, then R3 cannot be H; and pharmaceutically-acceptable salts thereof. These compds. are useful for alleviating Parkinsonism, glaucoma, hyperprolactinemia and for inducing weight loss in mammals. Pharmacol. data showed high degrees of dopamine D2 vs. D1 receptor affinity and selectivity achieved with compds. of the current invention, as well as high degrees of dopamine D2 receptor in vitro functional activity and specificity (D2 vs.  $\alpha$ 2). Dopamine D2 receptor in vivo functional potency: ED50 (µmol/kg) in the range of 0.004 to 0.100. Pharmaceutical formulations were given.

IT 93601-86-6, (S)-1,2,3,4-Tetrahydro-5-methoxy-N-propy1-2 naphthalenamine hydrochloride salt 101403-24-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (substituted 2-aminotetralins as dopamine receptor agonists)

oscal as a manufacturing as department receptor ago.

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

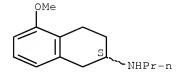
Absolute stereochemistry. Rotation (-).

● HCl

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:196540 HCAPLUS Full-text

DOCUMENT NUMBER: 122:9820

ORIGINAL REFERENCE NO.: 122:2185a,2188a

TITLE: Iodinated 2-Aminotetralins and 3-Amino-1-benzopyrans:

Ligands for Dopamine D2 and D3 Receptors

AUTHOR(S): Chumpradit, Sumalee; Kung, Mei-Ping; Vessotskie,

Janet; Foulon, Catherine; Mu, Mu; Kung, Hank F.

CORPORATE SOURCE: Department of Radiology, University of Pennsylvania,

Philadelphia, PA, 19104, USA

SOURCE: Journal of Medicinal Chemistry (1994), 37(24), 4245-50

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 17 Nov 1994

GI

AΒ In developing selective ligands for dopamine D2 and D3 receptors, several iodinated 2-aminotetralins and 3-amino-1-benzopyrans, trans-7-hydroxy-2-[N-(3'-iodo-2'-propenyl)amino]tetralin (I), trans-monohydroxy-2-[N-propyl-N- (3'iodo-2'-propenyl)amino]tetralins, and trans-monohydroxy-3,4-dihydro-3- [Npropyl-N-(3'-iodo-2'-propenyl)amino]-2H-1-benzopyrans. These compds. were evaluated for their binding profiles in several membrane prepns.: Spodoptera frugiperda (Sf9) cells expressing dopamine D2 (non-GTP coupled, low-affinity states) and D3 receptors, HEK293 cells expressing dopamine D2 receptors in high-affinity states (D2H), rat hippocampal homogenates for 5-HT1A receptors, and cerebellar homogenates for  $\sigma$  receptors. The mono-N-alkylated 2aminotetralin I displayed high  $\sigma$  binding (Ki = 1.68 nM) with a moderate D3 binding (Ki = 30.2 nM). Derivs. with one N-Pr and one N-(3'-iodo-2'-propenyl) group generally displayed high to moderate affinity to D3 receptors. All of the active D3 ligands also displayed comparable binding to the high affinity states of D2 receptors in HEK293 cells. Among all of the tetralin derivs. tested, 5-OH-PIPAT (II) showed the highest binding affinity to D3 receptors

(Ki = 0.99 nM) and better selectivity (KiD2H/KiD3, KiD2/KiD3, Ki5-HT1A/KiD3 and Ki $\sigma$ /KiD3 = 3.64, 327, 48.4, and 1250 nM, resp.), making it the best ligand for studying dopamine D2H and D3 receptors.

IT 3899-07-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

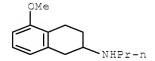
(preparation of iodinated aminotetralins and aminobenzopyrans as ligands

for

dopamine D2 and D3 receptors)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 18 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:260480 HCAPLUS Full-text

Т

DOCUMENT NUMBER: 120:260480

ORIGINAL REFERENCE NO.: 120:45805a, 45808a

TITLE: Determination of the dopamine D2 agonist N-0923 and

its major metabolites in perfused rat livers by HPLC-UV-atmospheric pressure ionization mass

spectrometry

AUTHOR(S): Swart, P. J.; Oelen, W. E. M.; Bruins, A. P.; Tepper,

P. G.; de Zeeuw, R. A.

CORPORATE SOURCE: Dep. Anal. Chem. Toxicol., Dep. Med. Chem., Groningen,

9713 AW, Neth.

SOURCE: Journal of Analytical Toxicology (1994), 18(2), 71-7

CODEN: JATOD3; ISSN: 0146-4760

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 28 May 1994

GΙ

The metabolism of the dopamine D2 agonist N-0923 (I) was investigated by an in vitro isolated liver perfusion. Determining the metabolic profile and identity of the different metabolites was achieved by using high-performance liquid chromatog. with UV detection, combined with atmospheric pressure ionization mass spectrometry. Using this technique, no extensive sample cleanup is required, and the studies can be performed without radioactivity. In addition to previously observed metabolites, nine new metabolic products

were identified. All metabolites were exclusively excreted into the bile, except for the despropyl metabolite which was also detectable in the perfusate. 5--0--glucuronidation and N-depropylation followed by 5--0--glucuronidation are the most important metabolic routes. N-dealkylation of the thienylethyl group followed by 5--0--glucuronidation and sulfation is a second major metabolic pathway. Catechol formation of the despropyl metabolite with or without subsequent conjugation was not found. Catechol formation of the desthienylethyl metabolite occurred, but only its glucuronide conjugates were found. This study complements previous results of in vivo metabolic studies using the radiolabeled racemate N-0437, and it explains differences in bile excretion during isolated liver perfusions using N-0923 and radiolabeled N-0923.

IT 154714-31-5

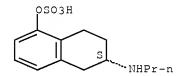
RL: BIOL (Biological study)

(metabolite, of dopamine D2 agonist N-0923, in liver, HPLC-mass spectrometry study of)

RN 154714-31-5 HCAPLUS

CN 1-Naphthalenol, 5,6,7,8-tetrahydro-6-(propylamino)-, hydrogen sulfate (ester), (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L22 ANSWER 19 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1991:632141 HCAPLUS Full-text

DOCUMENT NUMBER: 115:232141

ORIGINAL REFERENCE NO.: 115:39561a,39564a

TITLE: Fluorescent probes for dopamine receptors: synthesis

and characterization of fluorescein and

7-nitrobenz-2-oxa-1,3-diazol-4-yl conjugates of D-1

and D-2 receptor ligands

AUTHOR(S): Bakthavachalam, Venkatesalu; Baindur, Nandkishore;

Madras, Bertha K.; Neumeyer, John L.

CORPORATE SOURCE: Res. Biochem. Inc., Natick, MA, 01760, USA

SOURCE: Journal of Medicinal Chemistry (1991), 34(11), 3235-41

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:232141

ED Entered STN: 29 Nov 1991

GΙ

AB Fluorescent probes, e.g., I, have been designed and developed for dopamine D-1 and D-2 receptors. Fluorescein and/or NBD (7-nitrobenz-2-oxa-1,3- diazol-4-yl) derivs. of PPHT (II) (D-2 agonist), spiperone (D-2 antagonist), SKF 38393 (III) (D-1 agonist), and SKF 83566 (IV) (D-1 antagonist) were synthesized via

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

their amino-functionalized analogs and all ligands were pharmacol. evaluated by measuring their ability to displace [3H]SCH 23390 and [3H]spiperone from D-1 and D-2 receptor sites in caudate putamen of monkeys (Macaca fascicularis). The fluorescein derivs. of II and IV and the NBD derivs. of spiperone and IV retained the high affinity and selectivity of the parent ligands. The NBD derivs., e.g., I, showed higher D-2 receptor affinity and selectivity than their parent ligands. The enantiomers of the fluorescent derivs. of II were also synthesized and were found to exhibit stereoselectivity in binding to the D-2 receptor, with the S enantiomers having a considerably higher affinity than their R analogs. In contrast to these results, the fluorescein derivative of SKF 38393 showed only a low affinity for the D-1 receptor.

IT 3904-24-3P 93601-85-5P 93601-86-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and N-acylation of, with nitrophenylacetyl chloride)

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

HC1

RN 93601-85-5 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

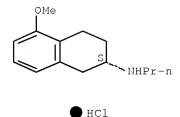
Absolute stereochemistry. Rotation (+).

HC1

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 20 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1991:608147 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 115:208147

ORIGINAL REFERENCE NO.: 115:35525a,35528a

TITLE: Tricarbonylchromium complexes of 2-aminotetralin

derivatives. Hydride displacement of aromatic methoxy

groups

AUTHOR(S): Persson, Marie; Hacksell, Uli; Csoregh, Ingeborg

CORPORATE SOURCE: Uppsala Biomed. Cent., Uppsala Univ., Uppsala, S-751

23, Swed.

SOURCE: Journal of the Chemical Society, Perkin Transactions

1: Organic and Bio-Organic Chemistry (1972-1999)

(1991), (6), 1453-9

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:208147

ED Entered STN: 15 Nov 1991

AB Tricarbonylchromium complexes of methoxy-substituted 2-propionamido- and 2-aminotetralins have been prepared and the stereochem. of (2S)-endo-tricarbonyl[8-methoxy-2-(N-propylpropionamido)tetralin]chromium has been established by x-ray structure anal. The complexes could be demethoxylated by treatment with LiAlH4. This reaction occurred more readily with the endo than with the exo isomers. The fastest demethoxylation was observed with the tricarbonylchromium complex of 2-(2-methoxyphenyl)-N,N-dipropylethylamine.

IT 101403-25-2

RL: RCT (Reactant); RACT (Reactant or reagent)

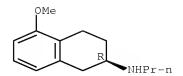
(acylation of)

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA

INDEX NAME)

Absolute stereochemistry. Rotation (+).



DOCUMENT NUMBER: 115:135704

ORIGINAL REFERENCE NO.: 115:23251a,23254a

TITLE: Preparation of substituted 2-aminotetralins useful as

dopaminergics

INVENTOR(S): Minaskanian, Gevork; Peck, James V.

PATENT ASSIGNEE(S): Whitby Research, Inc., USA SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENI	NO.			KIND DATE				APPLICATION NO.						DATE			
WO 910	3459	A1 19910321					 WO 1	 L990-	 US47	 34		1	 9900	 820			
₩:	AU, SD,	BB, SU	BG,	BR,	CA,	FI,	HU,	JP,	KP,	KR,	LK,	MC,	MG,	MW,	NO,	RO,	
R₩	: AT,		•	•		CG, TD,	,	CM,	DE,	DK,	ES,	FR,	GA,	GB,	IT,	LU,	
AU 906	4044			Α		1991	0408		AU 1	L990-	6404	4		1	9900	820	
US 511	8704			A		1992	0602		US 1	L991-	7588	87		1	9910	911	
PRIORITY AF	.:						US 1	L989-	4010	60	1	A 1	9890	830			
									WO 1	L990-	US47	34	1	A 1	9900	820	

OTHER SOURCE(S): MARPAT 115:135704

ED Entered STN: 05 Oct 1991

GΙ

The title compds. [I; R1 = N-heterocycle, substituted amino; R2, R3, R4 = H, OH, alkoxy, acyl, aroyl, etc.; R6 = C1-4 alkyl; X = H, OH, R6, NH2, etc.; n = 1-4] are prepared A mixture of 5-methoxy-2-(propylamino)tetralin, pyrrole compound II, and BH3-Me3N complex was refluxed in xylene to give ether III (R = Me), which was hydrolyzed with BBr3 in CH2C12 under N to give tetralinol salt III.HC1 (R = H) after treatment with ethereal HC1. III.HC1 showed Ki of 26 nM for dopamine D2-receptor binding affinity, vs. 110 nM with a reference Also prepared and tested were 8 addnl. I.

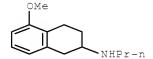
IT 3899-07-8, 1,2,3,4-Tetrahydro-5-methoxynaphthalene

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with dimethylpyrrolepropanoic acid, in preparation of dopaminergics)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 22 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1991:485442 HCAPLUS Full-text

DOCUMENT NUMBER: 115:85442
ORIGINAL REFERENCE NO.: 115:14511a

TITLE: A method of reducing body weight and food intake using

a dopamine D2 receptor agonist

INVENTOR(S): Belluzzi, James D.

PATENT ASSIGNEE(S): Whitby Research, Inc., USA SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA	TENT :	NO.			KIN	D	DATE	APPLICATION NO.							DATE	
							_									•	
	WO	9013	294			A1		1990	1115		WO	1990-	-US21	.35			19900419
		W:	AU,	CA,	JP,	KR											
		RW:	ΑT,	BE,	CH,	DE,	DK	, ES,	FR,	GB,	ΙΊ	C, LU	, NL,	SE			
	ΑU	9054	398			A		1990	1129		ΑU	1990-	-5439	8			19900419
	EP	4831	52			A1		1992	0506		ΕP	1990-	-9066	12			19900419
		R:	ΑT,	BE,	CH,	DE,	DK	, ES,	FR,	GB,	ΙΊ	C, LI	, LU,	NL,	SE		
	US	5234	945			A		1993	0810		US	1991-	-6412	21			19910104
PRIO:	RIT	Y APP	LN.	INFO	.:						US	1989-	-3490	91		Α	19890509
											WO	1990-	-US21	35		А	19900419

OTHER SOURCE(S): MARPAT 115:85442

ED Entered STN: 06 Sep 1991

GΙ

AB A method for treating the symptoms of obesity comprises administration of an effective amount of optically active [especially the (-) stereoisomers] I [R1 = Me, (un)substituted Ph, pyridyl, hydroxyphenyl, etc; R2-R4 = H, OA(A = hydrocarbyl, C(O)R5, C(O)NR5 (R5 = hydrocarbyl)); n = 1-3; R6 = C1-3 alkyl; with provisions]. Thus, racemic 2-(N-n-propylamino)-5- methoxytetralin was resolved into its (+) and (-) isomers, which were then converted to (+)-5-

hydroxy-2-[N-n-propyl-N-2-(2- thienyl)ethylamine]tetralin (II) and the corresponding (-) isomer (III) by a known method. In animal studies, III was slightly more potent than d-amphetamine in producing weight loss, although both produced significant weight loss. While considerably less potent than III, II showed a slight trend to produce weight loss. Animals did not regain lost weight quickly after removal of III.

IT 101403-25-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 ((thienyl)ethylation of)

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 101403-24-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn and (thienyl)ethylation of, in antiobesity agent preparation)

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 3899-07-8

RL: PROC (Process)
(resolution of, in antiobesity agent preparation)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

ACCESSION NUMBER: 1991:428926 HCAPLUS Full-text

DOCUMENT NUMBER: 115:28926

ORIGINAL REFERENCE NO.: 115:5077a,5080a

TITLE: Preparation of substituted 2-aminotetralins as D2

dopaminergic agents

INVENTOR(S): Peck, James V.; Minaskanian, Gevork

PATENT ASSIGNEE(S): Whitby Research, Inc., USA SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.			KIND DATE		APPLICATION NO.					DATE			
WO	9100	 727			A1	_	1991	0124	WO	1990-	 -US3761		-	19900702
	w:	AU,	CA,	DK,	FI,	JP,	KR,	ИО						
	RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, I	Γ, LU,	NL, SE			
CA	2065	450			A1		1991	0106	CA	1990-	-2065450			19900702
AU	9060	720			Α		1991	0206	AU	1990-	-60720			19900702
EP	4631	19			A1		1992	0102	EP	1990-	-911220			19900702
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, I	Γ, LI,	LU, NL,	SE		
US	5274	003			Α		1993	1228	US	1992-	-837229			19920218
US	5358	971			Α		1994	1025	US	1993-	-131845			19931004
US	5430	056			Α		1995	0704	US	1994-	-200338			19940223
PRIORIT	Y APP	LN.	INFO	.:					US	1989-	-375583		Α	19890705
									MO	1990-	-US3761		A	19900702
									US	1992-	-837229		АЗ	19920218

OTHER SOURCE(S): CASREACT 115:28926; MARPAT 115:28926

ED Entered STN: 27 Jul 1991

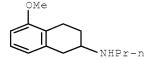
GI

AB Optically active or racemic title compds. I [X = CH2, O, S, N(sic); R1 = (substituted) aryl, heteroaryl, arylmethyl, aryloxymethyl, etc.; R2, R3, R4 = H, OH, hydrocarbyloxy optionally substituted by COR5, CONHR5, or CO2R5; R5 = alkyl, aryl; n = 1-4; R6 = alkyl; several provisos] were prepared I bind selectively to dopamine D2 receptors and are useful for treating glaucoma, schizophrenia, Parkinsonism, etc. For example, reductive alkylation of 2-(N-propylamino)-4-methoxytetralin by PhOCH2CO2H and BH3.NMe3 in refluxing xylene, followed by O-demethylation with pyridine-HC1 at 200° or with BBr3 in CH2C12 at room temperature, gave title compound II. In receptor binding assays in vitro, Ki values for II were: D2 125, D1 12,000 and  $\alpha$ 2 11,000 nM, vs. 110, 1000, and 190 for compound N-0437, a potent D2 agonist. Prepns. of addnl. I are described, plus biol. data for 3 more I.

IT 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin RL: RCT (Reactant); RACT (Reactant or reagent) (reductive alkylation of, by carboxylic acids)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 24 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:205495 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 110:205495

ORIGINAL REFERENCE NO.: 110:33935a,33938a

TITLE: Microdialysis and striatal dopamine release:

stereoselective actions of the enantiomers of N-0437 AUTHOR(S): Timmerman, Wia; Westerink, Ben H. C.; De Vries, Jan

B.; Tepper, Pieter G.; Horn, Alan S.

CORPORATE SOURCE: Dep. Pharm., State Univ. Groningen, Groningen, 9713

AW, Neth.

SOURCE: European Journal of Pharmacology (1989), 162(1),

143-50

CODEN: EJPHAZ; ISSN: 0014-2999

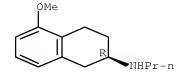
DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 10 Jun 1989

AΒ An intracerebral dialysis method was used to test both enantiomers of the very potent and selective dopamine (DA) D-2 agonist 2-(N-propyl-N-2thienylethylamino)-5-hydroxytetralin (N-0437) for their actions on DA receptors in the striatum of the rat. (-)-N-0437 induced a 60% decrease in DA release, which was independent of the presence or absence of a kainic acid lesion placed unilaterally in the striatum. Stereotyped behavior was apparent following administration of the (-) enantiomer. Thus, (-)-N-0437 displayed an agonistic action on both pre- and postsynaptic D-2 receptors. (+)-N-0437 did not induce any effect in the release model after peripheral administration nor did it induce any form of stereotypy. A comparison between the effects of (-)-N-0437 after oral (10  $\mu$ mol/kg) and transdermal (10  $\mu$ mol/kg) administration showed the advantages of the latter mode of administration. Transdermal application induced a much longer duration of action of the drug (13 h) in comparison with the oral mode (5 h). Thus, transdermal administration may be a very useful method of drug application for therapeutic use.

RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

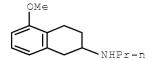


IT 3899-07-8, (±)-5-Methoxy-N-propyl-2-aminotetralin 101403-24-1, (-)-5-Methoxy-N-propyl-2-aminotetralin

RL: BIOL (Biological study)
(resolution into isomers of)

RN 3899-07-8 HCAPLUS

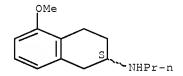
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L22 ANSWER 25 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:473163 HCAPLUS Full-text

DOCUMENT NUMBER: 109:73163

ORIGINAL REFERENCE NO.: 109:12241a,12244a

TITLE: Preparation of substituted 2-aminotetralins as

dopaminergic agonists.

INVENTOR(S): Horn, Alan S.

PATENT ASSIGNEE(S): Nelson Research and Development Co., USA

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 254989	A2	19880203	EP 1987-110341	19870717
EP 254989	А3	19880921		
EP 254989	B1	19900926		
R: AT, BE, CH,	, DE, ES	S, FR, GB,	GR, IT, LI, LU, NL, SE	
AT 56944	T	19901015	AT 1987-110341	19870717
ES 2031855	Т3	19930101	ES 1987-110341	19870717
AU 8776197	A	19880204	AU 1987-76197	19870728

AU 605777 B2 19910124

JP 63035547 A 19880216 JP 1987-188675 19870728
PRIORITY APPLN. INFO.: US 1986-891223 A 19860728
EP 1987-110341 A 19870717

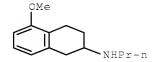
OTHER SOURCE(S): MARPAT 109:73163

ED Entered STN: 02 Sep 1988

GΙ

AB Aminotetralins I (R1 = organic radical containing fused aromatic ring; R2 - R4 = H, OA; A = H, hydrocarbyl, COR5; R5 = hydrocarbyl; n = 2, 3;  $\geq$ 1 of R2 - R4 =  $H; \geq 1$  of  $R2 - R4 \neq H; R2$  and R4 both  $\neq OA$ ) are prepared as dopaminergic receptor agonists, especially useful for reducing intraocular pressure. Reductive alkylation of 2-(N-n-propylamino)-5- methoxytetralin by 2benzothienylacetic acid using Me3N.BH3 in refluxing xylene under N, followed by demethylation using BBr3, gave [propyl(benzothienylethyl)amino]hydroxytetralin II. The IC50 of II for displacement of its 2-thienyl analog from dopamine D2 receptors in vitro (calf corpus striatum homogenate) was  $0.56 \, \mathrm{nM}$  (Kd =  $1.6 \, \mathrm{nM}$  and  $\mathrm{bmax} = 26.0 \, \mathrm{picomol/g}$ for tritiated analog). In contrast, II had IC50 > 100,000 at D1 dopamine receptors. An aqueous isotonic saline solution for ophthalmic use contains 0.001-1% I along with stabilizer, preservative, and buffer to pH 4.0-7.5. 3899-07-8, 2-(N-Propylamino)-5-methoxytetralin TΤ RL: RCT (Reactant); RACT (Reactant or reagent) (reductive alkylation of, by arylacetic acids) RN 3899-07-8 HCAPLUS

2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



CN

L22 ANSWER 26 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:207119 HCAPLUS Full-text

DOCUMENT NUMBER: 104:207119

ORIGINAL REFERENCE NO.: 104:32825a,32828a

TITLE: Structure-activity relationships of dopaminergic

5-hydroxy-2-aminotetralin derivatives with

functionalized N-alkyl substituents

AUTHOR(S): Seiler, Max P.; Stoll, Andre P.; Closse, Annemarie; Frick, Willy; Jaton, Annelise; Vigouret, Jean Marie

CORPORATE SOURCE: SANDOZ Ltd., Basel, CH-4002, Switz.

SOURCE: Journal of Medicinal Chemistry (1986), 29(6), 912-17

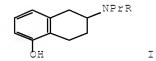
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 104:207119

ED Entered STN: 14 Jun 1986

GΙ



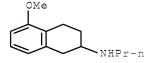
5-Hydroxy-2-aminotetralin derivs. in which one N-alkyl substituent carries a functional group, e.g. I [R = (CH2)3CN, (CH2)4NH2, (CH2)3OH, CH2CH2Ph], were prepared and their dopaminergic activities compared with those of 5-hydroxy-2-(dipropylamino)tetralin (5-OH-DPAT) and known ergolines. Several members of the series demonstrated high affinities in dopamine (DA) receptor binding and DA agonist properties in the rotational behavior model in the range of known potent ergolines. The results suggest that the accessory binding site for the larger N-alkyl substituent of the 5-hydroxy-2-aminotetraline can accommodate various neutral and bulky functionalities and is probably identical with the site(s) to which the 8-substituents of the ergolines bind.

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (amidation by, of protected glycine)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



IT 101403-24-1P 101403-25-2P

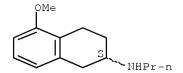
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and demethylation of)

RN 101403-24-1 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2S)- (CA INDEX NAME)

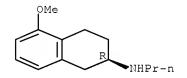
Absolute stereochemistry. Rotation (-).



RN 101403-25-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L22 ANSWER 27 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:206951 HCAPLUS Full-text

DOCUMENT NUMBER: 104:206951

ORIGINAL REFERENCE NO.: 104:32785a,32788a

TITLE: Substituted 2-aminotetralins

INVENTOR(S):
Horn, Alan S.

PATENT ASSIGNEE(S): Nelson Research and Development Co., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.		KIND	DATE	API	PLICATION NO.		DATE
US 4564628		A	19860114	US	1984-640685		19840813
US 4657925		A	19870414	US	1985-811768		19851220
US 4722933		A	19880202	US	1986-839976		19860317
US 4743618		A	19880510	US	1986-891262		19860728
US 4882352		A	19891121	US	1987-47882		19870508
US 4885308		A	19891205	US	1988-206193		19880613
US 4996226		A	19910226	US	1989-397749		19890926
US 5177112		A	19930105	US	1991-757336		19910910
US 5268385		A	19931207	US	1991-793848		19911118
PRIORITY APPLN.	INFO.:			US	1983-455144	A2	19830103
				US	1984-640685	A2	19840813
				US	1985-811768	A2	19851220
				US	1986-839976	A2	19860317
				US	1986-891223	A2	19860728
				US	1986-891262	A2	19860728
				US	1986-811768	A2	19861220
				US	1987-47882	A2	19870508
				US	1988-206193	A3	19880613

US 1989-371207 B1 19890626 US 1989-438357 B1 19891117

OTHER SOURCE(S): CASREACT 104:206951; MARPAT 104:206951

ED Entered STN: 14 Jun 1986

GΙ

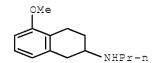
Aminotetralins I (R1 = 3- or 4-pyridyl, CPh2CN, 4-indolyl, 2- or 3-thienyl, -furyl, or -pyrrolyl, 4-imidazolyl; R2-R4 = H, OH, alkanoyloxy, aromatic acyloxy; n = 2, 3) are prepared as dopaminergic agonists for treatment of central nervous system disorders, e.g. Parkinsonism (no data). Thus, 5-methoxy-2-(N-propylamino)tetralin and 2-thiopheneacetic acid underwent reductive amination by Me3N.BH3 in xylene to give, after acidification, 54% thienylethylaminotetralin derivative II-HCl (R5 = Me), which was demethylated by BBr3 in CH2Cl2 to give 90% II-HCl (R5 = H). I were also prepared by a different method starting from the corresponding tetralones.

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent) (reductive amination of, with thiopheneacetic acid)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 28 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:199957 HCAPLUS Full-text

DOCUMENT NUMBER: 104:199957

ORIGINAL REFERENCE NO.: 104:31471a,31474a

TITLE: 5-Hydroxy-2-methyl-2-(di-n-propylamino)tetralin: Synthesis and central pharmacological effects

AUTHOR(S): Hacksell, Uli; Arvidsson, Lars Erik; Johansson, Anette

M.; Nilsson, J. Lars G.; Sanchez, Domingo; Andersson,

Bengt; Lindberg, Per; Wikstroem, Haakan; Hjorth,

Stephan; et al.

CORPORATE SOURCE: Uppsala Biomed. Cent., Univ. Uppsala, Uppsala, S-751

23, Swed.

SOURCE: Acta Pharmaceutica Suecica (1985), 22(2), 65-74

CODEN: APSXAS; ISSN: 0001-6675

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 14 Jun 1986

GΙ

AB (+-)-5-Hydroxy-2-methyl-2-(dipropylamino)tetralin (I) [85592-61-6] was prepared and tested for central pharmacol. effects in rats. I reversed reserpine-induced akinesia and this effect could not be blocked by pretreatment with haloperidol, suggesting that the effect was not mediated via dopamine receptors. It increased the synthesis rate of 5-hydroxytryptamine. In contrast to 5-hydroxy-2-(dipropylamino)tetralin, which is a potent dopamine-receptor agonist, I had no effect on central dopamine receptors.

II 85592-47-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and propionylation and reduction of)

RN 85592-47-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl- (CA INDEX NAME)

IT 85592-48-9P

RN 85592-48-9 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

● HC1

ACCESSION NUMBER: 1986:180037 HCAPLUS Full-text

DOCUMENT NUMBER: 104:180037

ORIGINAL REFERENCE NO.: 104:28349a,28352a

TITLE: Synthesis and radioreceptor binding activity of

N-0437, a new, extremely potent and selective D2

dopamine receptor agonist

AUTHOR(S): Horn, A. S.; Tepper, P.; Van der Weide, J.; Watanabe,

M.; Grigoriadis, D.; Seeman, P.

CORPORATE SOURCE: Dep. Pharm., Univ. Groningen, Groningen, 9713 AW,

Neth.

SOURCE: Pharmaceutisch Weekblad, Scientific Edition (1985),

7(5), 208-11

Ι

CODEN: PWSEDI; ISSN: 0167-6555

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 01 Jun 1986

GΙ

N(Pr)CH2CH2

AB The synthesis of a potent and selective D2 dopamine receptor agonist, N-0437 (I) [92206-54-7] of the 2-aminotetralin group is described. The results of a radioreceptor binding assay using a homogenate of porcine anterior pituitary as a tissue source for D2 dopamine receptors and [3H]spiperone as radioligand demonstrate that I is one of the most potent compds. so far evaluated in this test system.

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with 2-thiopheneacetic acid)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

OMe NHPr-n

L22 ANSWER 30 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:45758 HCAPLUS Full-text

DOCUMENT NUMBER: 104:45758
ORIGINAL REFERENCE NO.: 104:7281a,7284a

TITLE: Therapeutic composition for treating Parkinson's

disease

INVENTOR(S): Horn, Allan S.

PATENT ASSIGNEE(S): Nelson Research and Development Co., USA

SOURCE: Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 3417859 A1 19851114 DE 1984-3417859 19840514

PRIORITY APPLN. INFO.: DE 1984-3417859 19840514

OTHER SOURCE(S): CASREACT 104:45758

ED Entered STN: 23 Feb 1986

AB 2-(N-Phenylethyl-N-propylamino)-5-hydroxytetralin (I) is a D-2 dopamine receptor agonist, and can be used for the treatment of Parkinson's disease. I salts and esters are also active. Thus, I was 40 times as potent as apomorphine in an in vitro test system using the intermediate hypophyseal lobe of the rat. I was prepared by N-phenylethylation of 2-(propylamino)-5-methoxytetralin and subsequent O-demethylation of the reaction product.

IT 3899-07-8

RL: BIOL (Biological study)

(phenylatation and hydrolysis of, antiparkinsonism drug by)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

L22 ANSWER 31 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1985:55640 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 102:55640

ORIGINAL REFERENCE NO.: 102:8597a,8600a

TITLE: Resolved monophenolic 2-aminotetralins and

1,2,3,4,4a,5,6,10b-octahydrobenzo[f]quinolines: structural and stereochemical considerations for

centrally acting pre- and postsynaptic

dopamine-receptor agonists

AUTHOR(S): Wikstroem, Haakan; Andersson, Bengt; Sanchez, Domingo;

Lindberg, Per; Arvidsson, Lars Erik; Johansson, Anette

M.; Nilsson, J. Lars G.; Svensson, Kjell; Hjorth,

Stephan; Carlsson, Arvid

CORPORATE SOURCE: Dep. Pharmacol., Univ. Goeteborg, Goeteborg, S-400 33,

Swed.

SOURCE: Journal of Medicinal Chemistry (1985), 28(2), 215-25

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 24 Feb 1985

GI

AB The resolved title compds. 2-(dipropylamino)-5-hydroxy- and -7-hydroxytetralins I (R = 5- or 7-OH) and cis- and trans-propylbenzo[f]quinolinols (II) prepared by demethylation of the appropriate methoxy compound were evaluated for a detailed structure-activity relationship of their pre- and postsynaptic dopamine receptor-agonist activity. Male rats were used in the biochem. and motor activity expts. (S)-2-(Dipropylamino)-5-hydroxytetralin (I; R = 5-OH) [68643-08-3] and (R)-2-(dipropylamino-7-hydroxytetralin (I; R = 7-OH) [82730-72-1] were the most active compds.

IT 93601-85-5P 93601-86-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and demethylation of)

RN 93601-85-5 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 93601-86-6 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (1:1), (2S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● HCl

L22 ANSWER 32 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1984:604321 HCAPLUS Full-text

DOCUMENT NUMBER: 101:204321

ORIGINAL REFERENCE NO.: 101:30814h,30815a

TITLE: Selective D-2 dopamine receptor agonist

INVENTOR(S): Horn, Alan S.

Nelson Research and Development Co., USA PATENT ASSIGNEE(S):

U.S., 3 pp. SOURCE:

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4465692	A	19840814	US 1982-455197	19820103
GB 2157950	A	19851106	GB 1984-11483	19840504
GB 2157950	В	19881102		
FR 2563731	A1	19851108	FR 1984-7057	19840507
FR 2563731	B1	19890324		
JP 60246315	A	19851206	JP 1984-100334	19840518
CA 1248537	A1	19890110	CA 1984-454789	19840522
PRIORITY APPLN. INFO.:			US 1982-455197	19820103
OTHER SOURCE(S):	CASRE	ACT 101:20432	21; MARPAT 101:204321	

GΙ

- AΒ 5-Hydroxy-2-(phenethylpropylamino)tetralin (I) [87857-27-0] prepared as the HCl salt [71787-90-1] is a selective dopamine D2 receptor stimulator in humans. Thus, I prepared by reducing phenylacetic acid [103-82-2] with NaBH4 followed by addition of 5-methoxy-2-(propylamino)tetralin [ 3899-07-8] and tested in vitro showed potent selective D2 receptor agonist activity. 3899-07-8 ΙT
  - RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with phenylacetic acid)

Ι

- 3899-07-8 HCAPLUS RN
- 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME) CN

L22 ANSWER 33 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1984:34293 HCAPLUS Fuil-text

DOCUMENT NUMBER: 100:34293

ORIGINAL REFERENCE NO.: 100:5311a,5314a

TITLE: Tetraline derivatives

INVENTOR(S): Seiler, Max P.; Stoll, Andre

PATENT ASSIGNEE(S): Sandoz Ltd., Switz.

SOURCE: U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 186,878,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 4410519 ZA 8005648 PRIORITY APPLN. INFO.:	 А А	19831018 19820428	US 1981-243267 ZA 1980-5648 CH 1979-8347 CH 1980-5547 US 1980-186878	A	19810312 19800912 19790914 19800718 19800912	

ED Entered STN: 12 May 1984

GΙ

- AB Optically active or racemic aminotetralins I (R = H, acyl; R1 = alkyl; R2 = cyano, N3, substituted NH2, carbonyloxy, acyl, OH, F, CH:CH2, C1, SO2Me2, SOMe, SMe; X = alkylene) were prepared Thus aminotetraline II (R3 = Me, R4 = H) was alkylated with I(CH2)3OH to give II [R4 = (CH2)3OH], which was chlorinated and treated with MeSH to give II [R4 = (CH2)3SMe]. The latter was demethylated to give II [R3 = OH, R4 = (CH2)3SMe]. (-)-II.HCl [R3 = H, R4 = (CH2)3CN] was active for several hours as an antiparkinson agent at 1 mg/kg i.p. in rats.
- IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkylation of, with iodopropanol)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

L22 ANSWER 34 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1983:605619 HCAPLUS Fuil-text

DOCUMENT NUMBER: 99:205619

ORIGINAL REFERENCE NO.: 99:31464h,31465a

TITLE: QSAR of N-alkylated 2-aminotetralins as central

dopamine receptor stimulating agents

AUTHOR(S): Lien, Eric J.; Nilsson, J. Lars G.

CORPORATE SOURCE: Sch. Pharm., Univ. South. California, Los Angeles, CA,

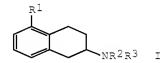
90033, USA

SOURCE: Acta Pharmaceutica Suecica (1983), 20(4), 271-6

CODEN: APSXAS; ISSN: 0001-6675

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 12 May 1984

GΙ



The central dopamine-receptor stimulatory activities of a series of 28 N-alkylated 2-aminotetralins (I; R1 = HO or MeO; R2 = alkyl or phenethyl; R3 = H or alkyl; R4 = H or MeO) were subjected to multiple regression anal.

Activities of 26 of the 28 compds. can be correlated by means of a 5-parameter (8-term) equation. The most important parameters appear to be the presence of the 5-OH group, the length of the longer substituent, and the thickness of the shorter substituent (LR2; BR2). Hydrophobicity seems to have only a minor influence on the activity. Sym. N-substituents with chain length no more than 3 carbons also contribute pos. to the receptor binding. The results obtained are in agreement with a recently proposed model.

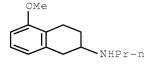
IT 3899-07-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dopaminerqic agonist activity of, structure in relation to)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)



L22 ANSWER 35 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1983:405381 HCAPLUS <u>Full-text</u> DOCUMENT NUMBER: 99:5381

ORIGINAL REFERENCE NO.: 99:973a,976a

---- · · --

TITLE: Therapeutically useful Tetralin derivatives

INVENTOR(S): Arvidsson, Folke Lars Erik; Carlsson, Per Arvid Emil;

Hacksell, Uli Alf; Hjorth, John Stephan Mikael;
Johansson, Anette Margareta; Lindberg, Per Lennart;

Nilsson, John Lars Gunnar; Sanchez, Domingo;

Wikstroem, Hakan Vilhelm

PATENT ASSIGNEE(S): Swed.

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			APPLICATION NO.				DATE					
						-						~ <b></b> -					
WO	82040	)42			A1		1982	1125		WO	1982-	SET6	U			19820	1510
	W:	ΑU,	DK,	FΙ,	HU,	JP,	NO,	RO,	SU,	US	5						
	RW:	AT,	BE,	CF,	CG,	CH,	CM,	DE,	FR,	GZ	A, GB,	LU,	NL,	SE,	SN	, TD,	, TG
AU	82845	550			A		1982	1207		ΑU	1982-	8455	0			19820	0510
JP	58500	714			T		1983	0506		JΡ	1982-	5015	85			19820	0510
EP	91437	7			A1		1983	1019		EΡ	1982-	9015	57			19820	0510
	R:	AT,	BE,	CH,	DE,	FR,	GB,	LI,	LU,	NI	, SE						
DK	82057	761			A		1982	1228		DK	1982-	5761				19823	1228
NO	83000	40			A		1983	0107		ΝО	1983-	40				19830	0107
FI	83021	L08			A		1983	0610		FΙ	1983-	2108				19830	0610
PRIORIT	Y APPI	LN.	INFO.	. :						SE	1981-	2922			A	19810	511
										WO	1982-	SE16	0		A	19820	0510

OTHER SOURCE(S): MARPAT 99:5381

ED Entered STN: 12 May 1984

GI

- Tetralins I (R = OH, acyloxy, carbamoyloxy, allyloxy, PhCH2O; R1-R3 = alkyl) were prepared Thus tetralone II (R4 = H) was methoxycarbonylated to form II (R4 = CO2Me), which was methylated, reduced, and aminated to give I (R = OMe, R1 = R2 = H, R3 = Me). The amine was acylated with EtCOCl then reduced twice, yielding I (R1 = R2 = Pr). Hydrolysis gave I (R = OH, R1 = R2 = Pr, R3 = Me)(III). At 20 mg/kg s.c. III increased motor activity in reserpinized rats from  $3.5 \pm 0.5$  to 121 = 14 counts/30 min. Its activity was not blocked by haloperiol.
- IT 85592-47-8P 85592-55-8P 85592-59-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation of)

- RN 85592-47-8 HCAPLUS
- CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl- (CA INDEX NAME)

RN 85592-55-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, (+)- (CA INDEX NAME)

Rotation (+).

RN 85592-59-2 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

● HCl

IT 85592-48-9P 85592-54-7P

RN 85592-48-9 HCAPLUS

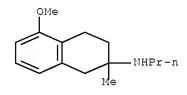
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 85592-54-7 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-2-methyl-N-propyl-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



● HCl

L22 ANSWER 36 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1981:480577 HCAPLUS Full-text

DOCUMENT NUMBER: 95:80577

ORIGINAL REFERENCE NO.: 95:13619a,13622a

TITLE: Tetraline derivatives and medicaments containing these

compounds

INVENTOR(S): Seiler, Max Peter; Stoll, Andre

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.
SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 26848	A1	19810415	EP 1980-105275	19800904
EP 26848 R: AT, BE, CH,	B1 DE, FR	19830504 , GB, IT, LU	J, NL, SE	
AT 3204	${f T}$	19830515	AT 1980-105275	19800904
FI 8002808	A	19810315	FI 1980-2808	19800908
IL 61013	A	19840831	IL 1980-61013	19800910
DK 8003902	A	19810315	DK 1980-3902	19800912
AU 8062382	A	19810319	AU 1980-62382	19800912
AU 542340	B2	19850221		
ZA 8005648	A	19820428	ZA 1980-5648	19800912
CA 1162934	A1	19840228	CA 1980-360185	19800912

ES 495024 Α1 19841016 ES 1980-495024 19800912 JP 56051437 19810509 JP 1980-127851 19800913 Α PRIORITY APPLN. INFO.: CH 1979-8347 A 19790914 CH 1980-5547 A 19800718 EP 1980-105275 A 19800904

OTHER SOURCE(S): MARPAT 95:80577

ED Entered STN: 12 May 1984

GΙ

$$\bigcap_{\mathbb{R}}^{\mathrm{NAR2}} \bigcap_{\mathbb{R}}^{\mathrm{NAR2}} \bigcap_{\mathbb{R}}^{\mathrm{NAR2}} \bigcap_{\mathbb{R}}^{\mathbb{R}} \bigcap_{$$

AB I (R = H or physiol. cleavable acyl; R1 = C1-4 alkyl; A = C1-5 alkylene; R2 = halogen, cyano, azido, etc.) were prepared as dopamine receptors (no data). Thus, 4 g 2-(propylamino)-5-tetralinol, 3.8 g (Me2CH)2NEt, and 2.5 g Br(CH2)4CN in 100 mL DMF were stirred 2 days at 60° to give II.

IT 3899-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkylation of, with iodopropanol)

RN 3899-07-8 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

L22 ANSWER 37 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1979:604218 HCAPLUS Full-text

DOCUMENT NUMBER: 91:204218

ORIGINAL REFERENCE NO.: 91:32751a,32754a

TITLE: N-Alkylated 2-aminotetralins: central dopamine-receptor stimulating activity

AUTHOR(S): Hacksell, Uli; Svensson, Uno; Nilsson, J. Lars G.; Hjorth, Stephan; Carlsson, Arvid; Wikstroem, Haakan;

Lindberg, Per; Sanchez, Domingo

CORPORATE SOURCE: Biomed. Cent., Univ. Uppsala, Uppsala, S-75123, Swed. SOURCE: Journal of Medicinal Chemistry (1979), 22(12), 1469-75

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 91:204218

ED Entered STN: 12 May 1984

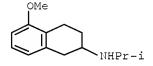
The title compds. I (R = HO or MeO; R2 = R3 = H, alkyl, etc.) as HBr, HCl, or oxalate salts were prepared from 5-methoxy-2-tetralone [32940-15-1]. The compds. were tested biochem. and behaviorally for dopaminergic activity using reserpinized rats. An Et or a Pr group on the N were optimal for activity, whereas the absence of either one resulted in inactive compds. Structure-activity relations are discussed.

IT 3864-46-8P 3904-24-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and behavioral and dopaminergic activities of)

RN 3864-46-8 HCAPLUS

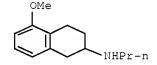
CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



HCl

L22 ANSWER 38 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1965:90659 HCAPLUS Full-text

DOCUMENT NUMBER: 62:90659
ORIGINAL REFERENCE NO.: 62:16154b-c

TITLE: The synthesis of alkoxy-1, 2, 3, 4-tetrahydronaphthalene

derivatives. I. 2-Amino-, alkylamino-, and

dialkylamino derivatives

AUTHOR(S): Ames, D. E.; Evans, D.; Grey, T. F.; Islip, P. J.;

Richards, K. E.

CORPORATE SOURCE: Parke Davis Co., Ltd., Hounslow, UK

SOURCE: Journal of the Chemical Society (1965), (April),

2636 - 41

CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 62:90659

ED Entered STN: 22 Apr 2001

- GI For diagram(s), see printed CA Issue.
- AB A series of the title compds., e.g. I, via dialkoxynaphthalenes and II, has been prepared for pharmacol. testing.
- IT 3864-46-8 3899-07-8 3902-41-8 3904-24-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

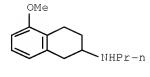
- RN 3864-46-8 HCAPLUS
- CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-(1-methylethyl)-, hydrochloride (9CI) (CA INDEX NAME)

● HCl

- RN 3899-07-8 HCAPLUS
- CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

- RN 3902-41-8 HCAPLUS
- CN 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy- (7CI, 8CI) (CA INDEX NAME)

- RN 3904-24-3 HCAPLUS
- CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)



HC1

L22 ANSWER 39 OF 39 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1965:90658 HCAPLUS Full-text

DOCUMENT NUMBER: 62:90658

ORIGINAL REFERENCE NO.: 62:16153b-h,16154a-b

TITLE: Potential psychotropic drugs. I. Synthesis of

 $\verb|naphthyl-containing| analogs| of N, N-dimethyltryptamine|\\$ 

and lysergic acid

AUTHOR(S): Pacheco, Henri; Gaige, Rene

CORPORATE SOURCE: Inst. Natl. Sci. Appl., Villeurbanne

SOURCE: Bulletin de la Societe Chimique de France (1965), (3),

861-8

CODEN: BSCFAS; ISSN: 0037-8968

DOCUMENT TYPE: Journal LANGUAGE: French

OTHER SOURCE(S): CASREACT 62:90658

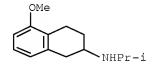
ED Entered STN: 22 Apr 2001

AΒ

GI For diagram(s), see printed CA Issue.

A series of compds. (I and II) was prepared because of their formal resemblance to N,N-dimethyltryptamine and lysergic acid. 1-C10H7CH2CH2Br (0.1 mole) and 0.3 mole appropriate amine heated 8-12 hrs. at  $80-100^{\circ}$  in an autoclave, cooled, and poured slowly into 100 cc. H2O containing 0.4 mole AcCl gave the corresponding 1-C10H7CH2CH2NRR'.HC1 (III) (method A). 1-C10H7COC1treated at 0° with 3 mole equivs. amine in Et20 or C6H6 yielded the corresponding 1-C10H7COCH2NRR' (IV) (NRR', m.p., and % yield given): NH2, 180°, 65; MeNH, 146-7°, 34; Me2N, 62-3°, 31; EtNH, 146°, 47; Et2N, 71-2°, 61; morpholino. 116-17°, 63; piperidino, -- (b0.6 180-90°), --; pyrrolidino, --(b0.25 183°), --. The appropriate N-unsubstituted amide (0.01 mole), 0.015 mole monosubstituted IV, or 0.02 mole disubstituted IV in 50 cc. Et20 refluxed 1 hr. with 0.015 mole LiAlH4 in dry Et20 yielded the corresponding III (method B). By these methods were prepared the following III (NRR', m.p., and % yield by method A and by method B given): NH2, 245°, --, 34; MeNH, 170°, 54, 22; 1-C10H7CH2CH2NMe, 158°, 10 (by-product), --; Me2N, 213°, --, 62; Et2N, 163°, --, 39; iso-PrNH, 180°, 42, --; pyrrolidino, 206°, 20, --; morpholino, 217°, 27, 21; piperidino, 258°, 49, 46; 1-C10H7CH2CN alkylated with NaNH2 and a suitable alkyl halide, and the product reduced with LiAlH4 and treated with HCl gave the corresponding 1-C10H7CHRCH2CH2CN.HCl (R, m.p., % yield, % yield of free base, and Rf on Whatman Number 1 paper impregnated with KH2PO4 and developed with BuOH saturated with H2O given): Me, 268° (95% EtOH), 55, 91.6, 0.382; Et, 181-2° (95% EtOH-Et2O), 40, 90.5, 0.462; iso-Pr, 202-3° (absolute EtOH-iso-Pr2O), 56, 86, 0.503; PhCH2, 174-6° (absolute EtOH-iso-Pr2O), 54, 94, 0.708. 3,4,5-(Meo)3C6H2COC1 (1 mole) and 3 moles suitable amine in C5H5N kept 1 hr. at room temperature and diluted with H2O gave the corresponding V (R, R1, R2, m.p., and % yield given): H, H, Me,  $99-100^{\circ}$  (C6H6-petr. ether), 39.4; Me, H, H, 142° (95% EtOH-petr. ether), 33; Et, H, H, 100°, 18.4; PhCH2, H, H, 118°, 24.4. 1-C10H7CHMeCOC1 (24.5 q.) added slowly at 0° to 150 cc. 6% MeNH2 in C6H6 yielded 14.2 g. 1-C10H7CHMeCONHMe (VI), m. 136-7°. VI (9.59 g.) added in small portions to 3.42 q. LiAlH4, stirred 10 hrs. at room temperature, and the

product treated with HCl yielded 59% I.HCl (R1 = R2 = Me, R3 = R4 = H) (VII.HCl), m. 260° (absolute EtOH-C6H6), Rf 0.812; VII b0.2 115°, n28D 1.6035. 1-C10H7CH2CHMeOH (15.25 g.), 50 cc. 40% HBr, and 10 cc. concentrated H2SO4 heated 2 hrs. on a water bath, and the organic phase decanted and treated again in the same manner during 1 hr. yielded 71% 1-C10H7CH2CHBrMe (VIII), b0.2 121°, n21D 1.619. VIII (24.9 g.) and 150 cc. 6% MeNH2 in C6H6 heated 14 hrs. at  $100^{\circ}$  in an autoclave gave 57% I (R1 = R4 = H, R2 = R3 = Me) (IX), b0.15 102°, n22.5D 1.6185; IX.HCl m. 140° (AcEt-petr. ether), Rf 0.574. 1-C10H7CHMeCOCl with Me2Zn yielded 64% 1-C10H7CHMeAc (X), b0.1 108°, n24D 1.5975; 2,4-dinitrophenylhydrazone m. 213°. X reduced with KBH4 in MeOH gave 72% 1-C10H7CHMeCHMeOH, m. 94°, which with HBr gave 62.5% 1-C10H7CHMeCHBrMe (XI), b0.1 131°, n27D 1.615. XI with MeNH2 yielded 6.4% I (R1 = R2 = R3 = Me)R4 = H),  $b0.15 \ 118^{\circ}$ ,  $n23D \ 1.589$ ;  $HC1 \ salt \ m. \ 205^{\circ}$  (Me2CO-Et2O). 1-C10H7CH2CH2NHMe (3.7 g.) and 3.6 g. CH2:CHCO2Me heated 5 hrs. at 95-100°, and the product treated in Et20 with HCl gave 70-90% I.HCl, (R1 = R2 = H, R3 = Me, R4 = MeO2CCH2CH2), m. 153°, Rf 0.670; free base b0.03 165°, n28D 1.569 (method C). The appropriate amine (0.02 mole) and the amide or ester of C1CH2CH2CO2Hin 30 cc. EtOH heated 4 hrs. at  $95-100^{\circ}$ , heated 1 hr. with 0.2 mole Na2CO3 or 0.4 mole NaHCO3, and the product treated with dry HCl in Et2O yielded the corresponding I (method D). 1-C10H7CHMeCHBrMe or 1-C10H7CHMeCH2Br (0.01 mole) heated 20 hrs. at 90° with Me2NCH2CO2Me yielded a small amount of , R1, R2, R4, Method, M.p., % yield; Rf, H, H, EtO2CCH2CH2, D, 140°, 38; 0.755, H, H, Et2NOCCH2CH2, D, 158°, 54; 0.650, H, H, Me2CHNHCOCH2CH2, D, 159°, 42; 0.660, Me, H, Et2NOCCH2CH2, D, 259°, 9; 0.809, Me, Me, MeO2CCH2CH2 (oxalate), C, 214°, small; 0.695 I (R1 = H, R2 = R3 = Me, R4 = MeO2CCH2CH2), b0.03 162-3°, n23D 1.563, Rf 0.7; oxalate m. 130°. Similarly were prepared the I.HCl (Rf = Me) listed in the table. 3864-46-8P, 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-



● HCl

RN 3899-07-8 HCAPLUS CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl- (CA INDEX NAME)

RN 3902-41-8 HCAPLUS

CN 2-Naphthylamine, 1,2,3,4-tetrahydro-N-isopropyl-5-methoxy- (7CI, 8CI) (CA INDEX NAME)

RN 3904-24-3 HCAPLUS

CN 2-Naphthalenamine, 1,2,3,4-tetrahydro-5-methoxy-N-propyl-, hydrochloride (9CI) (CA INDEX NAME)

● HCl

# Search History

L1		1 SEA	ABB=ON PLU=ON US2007-587637/APPS
L2	FILE	7 SEA	T' ENTERED AT 13:55:21 ON 01 AUG 2008  ABB=ON PLU=ON (101470-23-9/BI OR 50-36-2/BI OR 54-11-5/BI 59-92-7/BI OR 64-17-5/BI OR 855127-36-5/BI OR 9002-62-4/BI)
		ACT	AVE RIC637STRA/A
L3 L4		STR 1920 SEA	SSS FUL L3
		ACT	RIC637STRB/A
L5 L6 L7 L8		STR 1920)SEA STR	SSS FUL L5
L9			UCTURE UPLOADED
L10 L11 L12		6 SEA 0 SEA	SUB=L4 SSS SAM L9 ABB=ON PLU=ON L10 AND L2 SUB=L4 SSS FUL L9
L13		'HCAPLUS'	ENTERED AT 14:01:30 ON 01 AUG 2008 ABB=ON PLU=ON L12
L14 L15 L16 L17		STR 1 SEA 22 SEA	C'ENTERED AT 14:05:07 ON 01 AUG 2008  CUCTURE UPLOADED  CUB=L4 SSS SAM L14  CUB=L4 SSS FUL L14  CUB=CN PLU=ON L16 AND L2
L18 L19 L20 L21		40 SEA 144 SEA 1242 SEA	ENTERED AT 14:06:14 ON 01 AUG 2008  ABB=ON PLU=ON L16  ABB=ON PLU=ON SCHELLER D?/AU  ABB=ON PLU=ON HANSEN K?/AU  ABB=ON PLU=ON (L19 OR L20) AND L18
L22			ENTERED AT 14:17:19 ON 01 AUG 2008 ABB=ON PLU=ON L18 NOT L21